Statement of Guy Caruso, Administrator
Energy Information Administration
U.S. Department of Energy
before the
Subcommittee on Energy and Air Quality
Committee on Energy and Commerce
U. S. House of Representatives
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Mr. Chairman and Members of the Committee:

I appreciate the opportunity to appear before you today to discuss the Energy Information Administration's (EIA) *Short-Term Energy and Winter Fuels Outlook*, which we released on October 12. The text of this *Outlook* and some of the figures are attached to my testimony; the complete *Outlook* is available on our website at www.eia.doe.gov.

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Even before Hurricane Katrina struck, crude oil and petroleum product prices were setting records. On August 26, the near-month price of crude oil on the New York Mercantile Exchange closed at over $66 per barrel, which was $23 per barrel, or more than 50 percent, higher than a year earlier. On August 29, as the hurricane made landfall, average gasoline prices stood at $2.61 per gallon, 74 cents higher than one year earlier, and diesel prices were $2.59, or 72 cents higher. Oil prices worldwide had been rising steadily since 2002, due in large part to growth in global demand, which has used up much of the world's surplus production capacity. Refineries have been running at increasingly high levels of utilization in many parts of the world, including the United States. High production of distillate fuels and higher-than-average refinery outages this summer added to tightness in gasoline markets.

Throughout the summer months, EIA warned about the potential adverse impacts of an active hurricane season on domestic energy supply and prices. These warnings unfortunately are being reflected in the challenging realities brought about by Hurricanes Katrina and Rita. The impact on oil and natural gas production, oil refining, natural gas processing, and pipeline systems have further strained already-tight markets on the eve of the 2005-2006 heating season.

Projections are subject to considerable uncertainty. Price projections are particularly uncertain, because small shifts in either supply or demand, which are both relatively insensitive to price changes in the current market environment, can necessitate large price movements to restore balance between supply and demand. On the supply side, our *Winter Fuels Outlook* reflects a "Medium Recovery" or baseline scenario for recovery of energy operations in the Gulf of Mexico based on information available to EIA as of the end of the first week of October. On the demand side, the baseline projections incorporate the mean values for heating degree-days by Census Division as provided by the National Oceanic and Atmospheric Administration's Climate Prediction Center. EIA also examines 10-percent colder and 10-percent warmer winter cases to provide a range of heating fuel market outcomes.

This winter, residential space-heating expenditures are projected to increase for all fuel types compared to year-ago levels. On average, households heating primarily with natural gas are expected to spend about $350 (48 percent) more this winter in fuel expenditures. Households heating primarily with heating oil can expect to pay, on average, $378 (32 percent) more this winter. Households heating primarily with propane can expect to pay, on average, $325 (30 percent) more this winter. Households heating primarily with electricity can expect, on average, to pay $38 (5 percent) more. Should colder weather prevail, expenditures will be significantly higher. These averages provide a broad guide to changes from last winter, but fuel expenditures for individual households are highly dependent on local weather conditions, the size and energy efficiency of individual homes and their heating equipment, and thermostat settings.

Several factors are driving up winter prices and expenditures: first, international factors such as low spare crude oil capacity and political tensions contribute to uncertainty and low supply

growth for crude oil and high crude prices; second, recent hurricanes and associated disruptions exacerbate already tight markets in oil, petroleum products, and natural gas; and, finally, winter weather affects consumption and consequently household expenditures. This winter, we are likely to have a slightly colder weather, as measured by population-weighted heating degree-days, relative to last winter.

Overall, prices for petroleum products and natural gas are expected to remain high due to tight international supplies of crude and hurricane-induced supply losses. Under the baseline weather case, Henry Hub natural gas prices are expected to average around $9.00 per thousand cubic feet (mcf) in 2005 and around $8.70 per mcf in 2006. Retail gasoline prices are expected to average close to $2.35 per gallon in 2005 and about $2.45 in 2006. Retail diesel fuel prices are projected to remain high throughout the forecast period, averaging $2.45 in 2005 and $2.58 in 2006. Residential retail heating oil prices are expected to be $2.54 per gallon this winter season, a 32-percent increase over last winter, reflecting not only high crude oil prices, but also strong demand in the international market for distillate fuels. Residential electricity prices are expected to average 9.3 cents per kilowatthour (kwh) in 2005 and about 9.5 cents per kwh in 2006, with significant regional differences depending on the fuel mix used to generate electricity in each region of the country. Under a colder weather scenario, prices for natural gas and all petroleum products are projected to be somewhat higher.

Worldwide petroleum demand growth is projected to slow from 2004 levels, but still remain strong during 2005 and 2006, averaging 1.8 percent per year over the 2-year period, compared with 3.2 percent in 2004**.** Moreover, only weak production growth in countries outside of the Organization of Petroleum Exporting Countries (OPEC) is expected. With the loss of production in the Gulf of Mexico from the hurricanes, production declines in the North Sea, and the slowdown in growth in Russian oil production, non-OPEC supply is projected to increase by an annual average of only 0.1 million barrels per day during 2005 before increasing by 0.9 million barrels per day in 2006. In addition, worldwide spare production capacity is at its lowest level in 3 decades.

Total petroleum demand in the United Sates in 2005 is projected to average 20.5 million barrels per day, or 0.9 percent less than in 2004**.** Average demand for the first half of 2005

was at about the same level as during the first half of 2004 because rapidly rising prices constrained motor gasoline demand growth, weather factors depressed heating oil demand, and relative price factors lowered residual fuel oil and propane demand. Hurricane-related disruptions combined with increased prices result in a lower projected demand for petroleum products relative to pre-hurricane predictions. Petroleum demand in 2006 is expected to average 21 million barrels per day, or 2.2 percent higher than in 2005.

Total natural gas demand is projected to fall by 1.2 percent from 2004 to 2005 due mainly to higher prices, but recover by 3.0 percent in 2006 due to an assumed return to normal weather (early 2005 was a relatively mild heating season in the Midwest) and a recovery in consumption by the industrial sector, which is projected to increase by about 6 percent over 2005 levels**.** Residential demand is projected to decline slightly from 2004 to 2005 mostly because of relatively weak heating-related demand during the first quarter, while industrial demand is estimated to decline by nearly 8 percent over the same period due to the much higher prices for natural gas as a fuel or feedstock. By 2006, both end-use sectors recover somewhat with residential demand estimated to increase 2.6 percent from 2005 levels and industrial demand increasing by 6 percent. The industrial rebound in 2006 is partly because of assumed reactivation of damaged industrial plants in the Gulf of Mexico region but also reflects renewed fuel demand growth as domestic industrial plants adjust to higher prices. Power sector demand growth continues through the forecast period along with electricity demand growth. The pace is slower that the 5.7-percent rate projected for 2005 because an unusually hot summer and high cooling demand boosted 2005 growth significantly.

Domestic dry natural gas production in 2005 is expected to decline by 3.0 percent, due in large part to the major disruptions to infrastructure in the Gulf of Mexico from both Hurricanes Katrina and Rita, but increase by 4.2 percent in 2006. Working gas in storage as of October 7 was estimated at 2.99 trillion cubic feet, a level 162 billion cubic feet (bcf) below 1 year ago but still 1.2 percent above the 5-year average. Although natural gas storage remains above the 5-year average, the double blows of Hurricanes Katrina and Rita reduced the peak storage achievable over the remainder of the injection season from what was expected previously. Expected working gas in storage at the end of the fourth quarter is expected to be about 2.5 trillion cubic feet, 200 bcf below year-ago levels and about 50 bcf

above the 5-year average. Hurricane recovery profiles that differ from the scenario used for this month's baseline forecast would significantly affect the storage forecast.

In conclusion, due to continued tight crude oil markets, hurricane-related supply disruption, and slightly colder weather, the average U.S. household can expect to pay about $260 more for heating this winter, mostly due to already tight supplies and the effects of the Gulf coast hurricanes. Our projections are subject to considerable uncertainty, as noted, depending in part on the rate of recovery in the Gulf of Mexico and on the weather. A winter that is colder than expected could substantially raise estimated expenditure increases; milder weather, of course, would lower estimated expenditures.

This completes my testimony, Mr. Chairman. I would be glad to answer any questions that you and the other members of the Committee may have.